

REMARKS

This Supplemental Response is filed to submit revised claims 1 and 3 and entry of same is respectfully requested. No revisions have been made to any other portion of the application. In addition to the remarks submitted on January 7, 2011, the Applicant respectfully request for the Examiner to review and take into consideration the remarks submitted concurrently herein.

I. 35 U.S.C. § 103 Rejections

A. Obviousness

When determining the question of obviousness, underlying factual questions are presented which include (1) the scope and content of the prior art; (2) the level of ordinary skill in the art at the time of the invention; (3) objective evidence of nonobviousness; and (4) the differences between the prior art and the claimed subject matter. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). Moreover, with regard to the last prong of the *Graham* inquiry, “[t]o determine whether there was an apparent reason to combine the known elements in the way a patent claims, it will often be necessary to look to interrelated teachings of multiple patents; to the effects of demands known to the design community or present in the marketplace; and to the background knowledge possessed by a person having ordinary skill in the art. To facilitate review, this analysis should be made explicit.” KSR International v. Teleflex Inc., 127 U.S. 1727 (2007).

The person of ordinary skill in the art is a hypothetical person who is presumed to know the relevant prior art. Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc., 807 F.2d 955, 962, 1 USPQ2d 1196, 1201 (Fed. Cir. 1986). The level of ordinary skill in the art in this area may be determined by looking to the references of record. In re GPAC, Inc., 57 F.3d 1573, 35 USPQ2d 1116 (Fed. Cir. 1995). The references of record in this case reveal that a moderately high level

of sophistication in is present in the subject area of the subject area of the instant application. Thus, Applicants submit that, as substantiated by the cited references, those with at least a bachelor's degree in food technology or the like would most likely be a person with ordinary skill in this field of endeavor.

With respect to objective evidence of non-obviousness, the Applicant submits that the record supports the conclusion that there are long-felt but unsolved needs met by the present invention. For at least this reason the Applicant respectfully submits that the claimed invention is not obvious in view of the cited references.

Finally, *prima facie* obviousness requires that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references. This motivation-suggestion-teaching test informs the *Graham* analysis. "To reach a non-hindsight driven conclusion as to whether a person having ordinary skill in the art at the time of the invention would have viewed the subject matter as a whole to have been obvious in view of multiple references," there must be "some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct." In re Kahn, (Fed. Cir. 2006). The *KSR International* decision by the Supreme Court has not eliminated the motivation-suggestion-teaching test to determine whether prior art references have been properly combined. Rather, in addition to the motivation-suggestion-teaching test, the Court discussed that combinations of known technology that are "expected" may not be patentable. Stated in the affirmative, therefore, combinations are non-obvious and patentable if unexpected. In the present application, no single prior art reference nor any combination thereof (legitimate or otherwise) meets the claimed limitations of the Applicant's invention.

B. Rejections of Claims 1-4

Claims 1-2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bloukas (Meat Science Vol. 5, No. 2, 133-144 1997) in view of the combination of McKee (U.S. Pat. No. 2,060,422) and Domazakis (WO 02/065860). Claims 3-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bloukas (Meat Science Vol. 5, No. 2, 133-144 1997), McKee (U.S. Pat. No. 2,060,422), and Domazakis (WO 02/065860), further in view of Gryczka et al. (U.S. Pat. No. 4,147,807). For the following reasons, Applicant respectfully requests reconsideration and withdrawal of this rejection.

First, the Examiner asserts that Applicant does not provide details to support its allegation that Bloukas discourages the practice of direct oil addition. According to Bloukas at page 143, direct oil addition leads to products with undesirable characteristics. Bloukas states that “[t]he direct incorporation of olive oil results in fermented sausages with an unacceptable appearance and very soft texture.” Claims 1 and 3 clearly claim in step (b) the limitation of liquid olive oil being directly added to the meat mixture. According to Bloukas, the direct addition of oil (without pre-emulsification) leads to undesirable characteristics (effect on dehydration rate, undesirable softness, etc). However, following the method disclosed in the present application, desirable characteristics are observed in the resulting product.

Bloukas fails to produce an acceptable product when olive oil was added directly in the meat preparation (i.e. without pre-emulsification with soy protein), possibly because he applied the practices suitable for the addition of SFA-rich fat sources (animal fat-lard), in a method intended for the production of fermented sausages, containing olive oil (unsaturated fatty acid-rich fat). By adding salt at the end, Bloukas minimized the stable incorporation (by means of emulsification/entrapment) of olive oil droplets, thus probably allowing for a fine film of fat

forming over the lean parts. This may have been acting like an insulator, reducing the release of water, during drying. (See Bloukas, page 137, last 4 lines). Bloukas discourages direct addition of olive oil because undesirable characteristics are obtained.

The order of addition of salt, among other non-meat ingredients, is also critical in meat processing and may vary, depending the intended type of meat-based product. Contrary to normal practices for the making of fermented sausages, as reflected in Bloukas where salt is added at the end of meat-paste preparation, the current application teaches the addition of salt in the beginning. This assures a more- enhanced protein solubilisation/activation, compared with the practice of late salt addition, as suggested by the common techniques and also stated in Bloukas.

Domazakis, contrary to the method suggested in Bloukas, did not pre-emulsify the oil to ensure the desirable effect in the final product, but instead enhanced the emulsification capacity of the system *in situ* (in the bowl chopper), by adding salt in the beginning. This prevented the undesirable effects in the resulting product.

In addition, it is unfathomable that a skilled person would be motivated to apply the method of manufacturing cooked, meat-emulsion based products, for the making of fermented sausages. Fermented sausages (dry, or semi-dry), constitute a substantially different category of meat-based products, governed by distinct methodology and practices. If a skilled person were indeed taught by Domazakis, such person would have been also tempted to add water and phosphates in the meat preparation intended for fermented sausage making, a practice that would have a detrimental effect on the resulting product (i.e. undesirable moisture retention, undesirable softness, discolorisation and reduced shelf life). Moreover, due to the fact that Domazakis refers to a completely different product category, Domazakis rather would not have

had been considered by the average skilled person concerned with the use of olive oil in the preparation of fermented sausages and is, thus, not relevant for the present case.

Bloukas specifically teaches that “the frozen beef and pork meat were cut . . . at low speed and mixed with other ingredients, except sodium chloride.” (See page 135, lines 15-17). Therefore, salt is added at a later stage unlike the present invention where salt is added in the first step, step (a), of the claimed method in claims 1 and 3 of the present invention.

Domazakis teaches a distinct and different category of meat-based products. Moreover, the combination of McKee with Bloukas does not lead one skilled in the art person to the subject matter of claims 1-4. As discussed above, Bloukas teaches the incorporation of oil in fermented sausages, but clearly discourages the practice of direct oil addition, as it leads to products with undesirable characteristics. In addition, neither Bloukas, nor McKee teach the addition of sodium chloride at the beginning of the mixing/chopping process, during the preparation of a meat paste suited for fermented dry and semi-dry sausages. The Examiner asserts that the Applicant does not claim this limitation; however, step (a) in claims 1 and 3 clearly claim the addition of salt in this beginning step which is also prior to any olive oil being added. Moreover, due to irrelevancy of the McKee reference (as discussed hereinbelow), a person of ordinary skill would not be able to combine Domazakis, Bloukas and McKee concerning the preparation of dry or semi-dry sausages.

Even if the average skilled person would have ignored the fact that Domazakis refers to a completely different category of meat-based products and would choose to combine certain features from the McKee with the Bloukas, he would not have arrived at the subject matter of the under examination patent, since none of the references give any hint to the average skilled person with regard to the optimum temperature for olive oil addition (i.e. -2°C), which is an essential

prerequisite for the preparation of olive oil containing fermented sausages. It should be noted that McKee teaches the processing of meat at a temperature ranging from 25-35F (i.e. -3.8 to 0°C), while no information is given regarding the optimal conditions of olive oil mixing into the meat preparation for the making of products of this category.

Even if one combines the teachings of the referenced prior art, one skilled in art would not produce the product of the present application. In combining the teachings of the referenced art, one would add the olive oil prior to the addition of sodium chloride (or salt) as a component of a pre-emulsion rather than adding the olive oil after the salt is added as claimed in claims 1 and 3 of the present application.

The Examiner asserts that the McKee reference is analogous art because it makes “sausage products from meat.” That is an extremely broad categorization. The method taught by McKee is for the development of a lighter brighter color to fresh meat. This is accomplished, as claimed, by quick freezing the fresh meat, then subjecting it to mechanical pressure while in a frozen condition. McKee does not teach any methods for the preparation of fermented dry and semi-dry sausages. McKee also does not teach the incorporation of olive oil incorporation in such products as claimed in claims 1 and 3 of the present application. The entire treatment of fresh meat, as taught by McKee, i.e. grinding or comminuting or processing the meat, at a temperature at or below freezing, is carried out only to retain the desirable meat color and no side-effects are indicated regarding the stability of the resulting meat-paste, when oil in liquid form is incorporated therein as claimed in claims 1 and 3. Therefore, we consider this reference as irrelevant and not able to be combined with any other reference to try and show obviousness. The Examiner asserts that each reference may not be attacked individually; however, if a

reference is not relevant or is non-analogous art, as is the case with McKee, it is not able to be used in combination with other references.

Regarding the effect of fast freezing on the color of the meat, the Applicant notes that rather the composition of the atmosphere wherein the meat is stored, determines the color of the meat and the nature of spoilage it develops. The importance of the quick freezing lies on the prevention of large ice crystals, which are normally formed outside the muscle fibers in slow freezing.

In specific response to point (C) from the Examiner's communication of 12/24/2009, Domazakis describes the process of preparing meat emulsion-based products, as follows: "Thin-chopped non-fat meat of temperature 0°C is mixed with H₂O of temperature - 2°C.....When the temperature of the mixture is 2°C, we insert the olive oil.....The mixture continues until the temperature is 4°C". Therefore, the critical temperatures for the ingredients disclosed in Domazakis for meat, water and oil, in the case of emulsion-type meat products differ from what was considered in Examiner's report, i.e. meat is at the temperature of -4°C, instead of -2 °C. When the present application and Domazakis are compared it is evident that the critical temperature for oil addition differs by 4 degrees C.

Moreover, according to Domazakis, the olive oil containing emulsion-type meat based products described therein are prepared by initially mixing finely chopped meat with water, salt, polyphosphoric salts, preservatives, vegetable proteins, milk proteins and starch in an appropriate mixing apparatus and subsequently mixing with olive oil, thereby preparing a finely comminuted meat emulsion with an end temperature of 4°C, which is filled in casings and subjected to a heat treatment at 72°C. Domazakis alone or in combination with the other prior art neither teaches on skilled in the art something about the preparation of fermented sausages, nor about the way of

incorporating olive oil in a meat mass suited for the preparation of fermented sausages. None of the prior art, including Domazakis, uses olive oil as a stabilizer as claimed in claims 1 and 3 of the present application. The chemical and physical characteristics of the fermented sausages are substantially different to the cooked emulsion-type meat products. Domazakis does not teach its process or method for the use with fermented sausages. It is not even possible to combine the elements of the prior art references together due to the varying products disclosed in the cited prior art references. It would not occur to one skilled in the art to combine these references.

The Examiner asserts that the temperatures disclosed in the prior art references are the same as claimed in the present application; however, as discussed above that is inaccurate. With regards to the temperature profile of the method disclosed in the present application, Bloukas and McKee are silent with regard to the use of the temperature - 2°C, as optimum for the addition and stable incorporation of oil in a meat paste, suited for fermented dry and semi-dry sausages as claimed in the claims 1 and 3 of the present application. The temperature profile claimed in the present application serves for the stability of the meat products.

In conclusion, even if a person skilled in the art would have ignored the fact that Domazakis refers to a completely different category of meat-based products and would choose to combine certain features from McKee and Bloukas, such a person would not have arrived at the subject matter of the present application since none of the references disclose the optimum temperature for olive oil addition (i.e. -2°C) as claimed in claims 1 and 3. This is a critical limitation for the preparation of olive oil containing fermented sausages. Moreover, upon reading the cited prior art references one would think to add olive oil prior to the addition of sodium chloride, as a component of a pre-emulsion, as taught by Bloukas, rather than adding salt first and then adding olive oil.

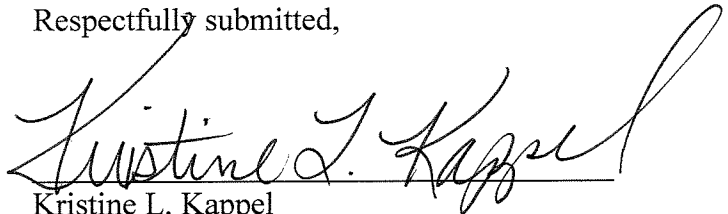
Applicant therefore respectfully submits that neither Bloukas nor McKee nor Domazakis nor any legitimate combination thereof teach or suggest all of the limitations of claims 1-4.

II. Conclusion

Applicant respectfully requests the Examiner to enter this Supplemental Response in conjunction with the Amendment filed on January 7, 2011. If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding the present supplemental response to amendment, it is respectfully requested that the Examiner please telephone Applicant's undersigned attorney in this regard. Should any fees be necessitated by this supplemental response to amendment, the Commissioner is hereby authorized to deduct such fees from Deposit Account No. 11-0160.

Respectfully submitted,

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